

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Northwest Regional Office, 3190 - 160th Ave S.E. • Bellevue, Washington 98008-5452 • (206) 649-7000

Professional Engineer's Statement Everett Smelter Cleanup, 2000-2001

Sampling and soil remediation were carried out at the following homes within the Everett Smelter Site during the years 2000 and 2001:

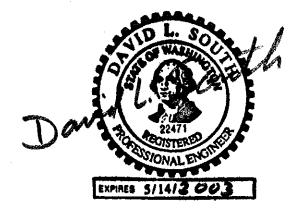
Address	<u>Owner</u>
Muriel Jones	110 Bridgeway
Andrew Michels	235 Bridgeway
Jeanette Mempa	236 Bridgeway
Thomas, Christine & Ronnie	240 Bridgeway
Martha Watkins	244 Bridgeway
Joanne Felmer	2803 Medora Way
Terry Tavares & Linda Guy-Tavares	2811 Medora Way
Duane & Edna Rapelje	2817 Medora Way
Dave & Rene Goodrich	2818 Medora Way
Ron & Bonnie Sylvester	2830 Medora Way
Anh Black	528 Hawthorne
Steve & Sherrie Wamba	415 Legion Drive
Gary & Darlene Bunger & Sandra Kane	112 Skyline Drive
Michael Paeth	116 Skyline Drive
Randy Hall	212 Skyline Drive
Willy Pompey	215 Skyline Drive
Dorothy Larson	218 Skyline Drive
Bob & Peggy Redline	221 Skyline Drive
Michael & Sheila Crehan	222 Skyline Drive
Kurt Bertilson	230 Skyline Drive
Louise Hiller	302 Skyline Drive
Margie Hogle	303 Skyline Drive
Fred Brown	307 Skyline Drive
Jackie Robinett	308 Skyline Drive
Al Vandenbosch	316 Skyline Drive
Al Sorenson	320 Skyline Drive
Jo Newland	323 Skyline Drive
John & Christina Bull	328 Skyline Drive

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Based on the results of testing and inspections, it is my opinion that the soil remediation carried out at these homes was performed in substantial compliance with the plans, specifications, and related documents governing the work.

Remediation work remaining to be done at these homes includes evaluation of crawl space data and addressing crawl spaces as necessary and carpet and duct cleaning. Some plant replacement also remains to be done and will be done this Spring.



Washington Department of Ecology Everett Smelter Site 2000-2001 Cleanup

Details of Cleanup Activities

The Department of Ecology (Ecology) targeted the yards of 28 homes within the Everett Smelter Site for cleanup in 2000 and 2001. Cleanup activities were conducted between August 2000 and March 2001, and again between July and November, 2001. The cleanup was conducted according to the Everett Smelter Site: Integrated Final Cleanup Action Plan and Final Environmental Impact Statement for the Upland Area.

This report describes the cleanup actions that were conducted, what arsenic-contaminated soil was not removed and where it remains for the following location:

Property Owner:

Edna and Duane Rapelje

Address:

2817 Medora Way Everett, WA 98201

Snohomish County State of Washington

Tax Parcel No.

005203-000-022-00

This property was divided by Ecology into three Decision Units, A, B and C, as shown on the attached map, for purposes of pre-cleanup sampling and decision-making regarding the depth to which excavation was required. The cleanup of this home was conducted in two phases. Decision Unit B and the planting beds in Decision Unit C were cleaned up between December 12, 2000 and January 12, 2001. Decision Unit A and the remainder of Decision Unit C were cleaned up between July 27 and August 1, 2001. The following is a summary of the work done in the remediation of the property within each of the decision units.

Decision Unit: A

Results of pre-cleanup sampling indicated 24 inches of soil were to be excavated from within this decision unit. Attachment B shows that below 24 inches, results of composite sample analyses are below the remediation level of 150 parts per million (ppm).



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However, because the soil below 24 inches contains arsenic levels above the cleanup level of 20 ppm, a geofabric marker was placed.

Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 24 inches. The paved driveway and the sidewalks running from Medora Way and from the driveway to the front door of the house were not removed during excavation. Along the sides of the existing home, the walkway from Medora Way to the front door, the paved driveway and the walkway from the driveway to the front door, the excavation was sloped approximately 1:1 away from the foundations to protect the integrity of the structures. At the owner's request, the following plants and planting beds were not removed: the spruce tree and lilac in the northwest corner of the property; the rhododendrons on either side of the walkway from Medora Way to the front door; the planting beds immediately adjacent to the house and the planting bed on the north side of the property, starting with the large shrub, located 38 feet east of Medora Way and 6 feet south of the chain link fence separating this property from 2811 Medora Way, and extending to the eastern property line. Within the dripline of all trees and shrubs, the topsoil and sod was scraped from the top of the root ball; beyond the dripline, soils were excavated to 24 inches. After placing a geofabric marker, the Decision Unit was backfilled with clean material, as described in the Specifications for Everett Residential Soil Remediation. The parking strip along the street and the gravel area south of the paved driveway were restored with clean backfill material, topped with 4 inches of crushed rock and compacted. After placing the topsoil, sod and shrubs were planted.

Decision Unit: B

Results of pre-cleanup sampling indicated 24 inches of soil were to be excavated from within this decision unit. Attachment B shows that below 24 inches, results of composite sample analyses are below the remediation level of 150 ppm. However, because the soil below 24 inches contains arsenic levels above the cleanup level of 20 ppm, a geofabric marker was placed.

Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 24 inches. The planting bed along the southern property line was excavated starting at sample location L2 and extending to the eastern property line. The planting bed along the eastern property line was excavated to the large lilac near the intersection of the north and eastern property lines. At the owners' request, three maples along the eastern property line were not removed. Within the dripline of the trees, the topsoil and sod was scraped from the top of the root ball; beyond the dripline, soils were excavated to 24 inches. In the planting bed on the western slope of Decision Unit B, the lower 4 to 5 feet of the slope was removed. A rock wall was placed at the toe of the slope to prevent erosion. The grape arbor and three Japanese Maples were not removed. Within the dripline the Japanese Maples, soil was scraped from the top of the root ball; beyond the dripline, soils were excavated to 24 inches. The decision unit was filled with clean backfill material, as described in the *Specifications for Everett Residential Soil Remediation*. After placing topsoil, sod and shrubs were planted.

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Decision Unit: C

Results of pre-cleanup sampling indicated 6 inches of soil were to be excavated from within this decision unit. Attachment B shows that below 6 inches, results of composite sample analyses are below the remediation level of 40 ppm. A geofabric marker was not placed.

Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 6 inches. The planting bed along the southern property line was excavated from sampling location L2 and extending to the grape arbor. The planting beds adjacent to the house were not removed. The decision unit was filled with clean backfill material and topsoil, as described in the *Specifications for Everett Residential Soil Remediation*, and then covered with sod.

Dan Cargill

Washington Department of Ecology

January 9, 2002

DRC:dc

Attachments: A. Site Map

B. Graphs of Arsenic Concentration vs. Depth

C. Explanation of graphs

Note: If the attachments listed above do not accompany this document, copies may be obtained from Ecology. Please contact Central Records at Ecology's Northwest Regional Office (NWRO), at (425) 649-7190 for information on obtaining copies.

cc: Ecology Central Files, NWRO
Office of the Attorney General
Snohomish Health District
City of Everett Public Works
Everett Public Library
Snohomish PUD
Northeast Everett Community Organization
Northwest Everett Neighborhood Association

Asarco Information Center, Everett

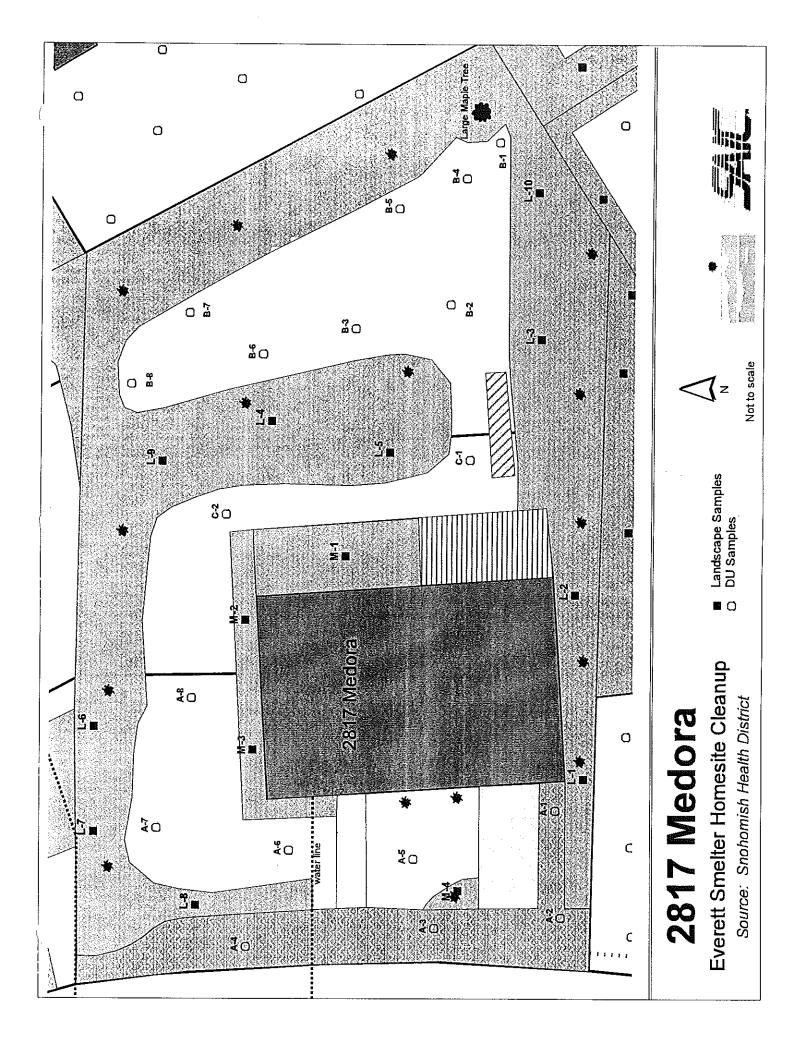
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